

Bulletin

National Partnership for Environmental Priorities (NPEP)

Summer 2005

"Minimizing Waste and Maximizing the Bottom Line"

Welcome to our first issue. The NPEP Bulletin will be delivered to you quarterly to keep you informed of the latest NPEP and Waste Min news and events. Each issue will have a different theme. This Issue: NPEP Partner Spotlight. We distribute the Bulletin electronically in order to minimize waste, conserve resources, and promote the "Paperless Office."

What Is NPEP?

NPEP is a program that encourages public and private organizations to form voluntary partnerships with EPA to reduce the use and/or release of any of 31 Priority Chemicals (PCs). Read more about PCs at: epa.gov/minimize/chemlist.htm

Join NPEP Today

Want to help the environment while improving your bottom line? Interested in Waste Min? Enroll today: epa.gov/minimize/partnership.htm

Information Exchange

Contact us with your questions, events, articles, ideas, comments, and suggestions. We want to hear from you.

The **focus of our next issue** will be **State and Regional Waste Min programs**. Send us your thoughts and contributions today via email or our comments and questions <u>form</u> at *epa.gov/minimize/contactus.htm*

Current Query - NPEP Bulletin

What are your opinions of the new NPEP bulletin? <u>Contact Us</u> with your answers and comments

Upcoming Events: September 27-29, 2005 WASTECON 2005 Austin, Texas

October 24-25, 2005 NPEP Awards Ceremony Crystal City, Virginia

October 26-27, 2005 National Waste Min Contact Meeting Crystal City, Virginia

Send us your event today. Visit the Waste Min Calendar: epa.gov/minimize/calendar.htm

International Truck Receives NPEP Achievement Award



Barry Laughlin (left), Plant Manager; Margaret Guerriero, Director of Waste Pesticides and Toxics, EPA Region 5; Maria Vickers, Deputy Director, EPA's Office of Solid Waste; Edith Ardiente, Vice President, Environmental Affairs; and Tim McDaniel, Manager, Environmental Health and Safety.

On February 15, Maria Vickers, Deputy Director of EPA's Office of Solid Waste, presented International Truck and Engine Corporation, Springfield Operations with an NPEP Achievement Award for completing their enrollment goals. International, the 2001 NPPR PBT Cup winner, is a charter member of NPEP and has been an NPEP partner since 2002.

International is the first NPEP partner to receive an achievement award. The Corporation succeeded in meeting five enrollment goals, including reducing over 2,300 pounds of lead, recycling more than 7,000 pounds of solvents, and reducing the use of methyl ethyl ketone by over 140,000 pounds.

Read the International Success Story: epa.gov/minimize/intl_trk.htm

Johnson Controls, Inc. Reduces Waste, Saves Money, and Increases Production Rates

Johnson Controls, Inc. (JCI) recently completed their partnership goal. The Johnson Controls Battery Group, in Kernersville, NC, manufactures automotive/marine batteries. JCI's goal involved process modification using different technology and process redesign, allowing them to "stamp" positive grids in lieu of a "casting" process. This resulted in reductions in lead, particulate matter, sulfur dioxide, nitrogen oxides, volatile organic

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U.S. Steel Reduces Lead and Chromic Acid, Saves \$43,000

United States Steel Corporation (U.S. Steel) recently completed their partnership goals. U.S. Steel owns and operates an integrated steel manufacturing facility in Pennsylvania known as the Mon Valley Works. Their first goal involved modifying a coating process that generated waste with a high percentage of lead. The Corporation found that by controlling the quantity of flux in the flux box, the continued on page 3

Sheppard Air Force Base Reduces Hazardous Waste through Product Substitution

Sheppard Air Force Base, Texas, completed their partnership goal of eliminating the use of acid alodine, a hazardous product used as a bonding agent during aircraft painting operations.

Chromium, a hazardous substance, is a component of alodine. Following the

application of alodine to the aircraft surface, several gallons of hazardous wastewater was generated through a required rinsing process. The hazardous waste was then stored in a drum until proper disposal.

Through Sheppard's cooperative efforts with EPA, Texas Commission on Environmental Quality, and the Wichita Falls/Wichita County Public Health Department, a resolution was reached changing the Technical Order to permit the use of a non-hazardous material product, Pre-Kote. *continued on page 3*

NPEP Partner Update

Forty-eight organizations have now partnered with NPEP to reduce the use and release of priority chemicals. These organizations are located across 17 states and Puerto Rico.

Most of our partners (21) are found in Region 3. There are eight NPEP partners in Region 5, seven in Region 2, seven in Region 6, and five in Region 4. Region 7 is now represented by two facilities.

Twelve partners have achieved their NPEP partnership goals. Their achievements total a hazardous chemical reduction of over one million pounds.

Benefits of NPEP Partnership

- Public recognition for environmental achievements.
- Use of NPEP logo.
- NPEP membership plaques and awards celebrating your success.
- Local media recognition for program accomplishments.

More: epa.gov/minimize/benefits.htm

Submit Additional Goals or Enroll More Facilities

Interested in submitting additional goals to NPEP? Thinking of expanding your waste min project to other facilities in your organization? Whether you've completed your initial goals or not, you can submit more goals for which you will be publicly recognized. Visit NPEP now at epa.gov/minimize/partnership.htm

Energy Recovery from Waste Advancing as a Form of Green Energy

Choosing energy sources wisely can reduce the amount of waste disposed. States are providing more incentives for recovering energy from waste (epa.gov/minimize/energyrecov.htm) The influence state Renewable Portfolio Standards (RPS) have over the quantity of energy recovered from waste is increasing as new states, such as Pennsylvania and New York, adopt RPS legislation. Sources such as landfill methane recovery and methane produced from the anaerobic digestion of organic materials are among those strongly supported. In Vermont, customers can choose to purchase electricity generated from the manure of dairy cows, turning a waste stream into a source of revenue.

These trends show that energy recovery from waste is becoming an acceptable form of green energy and that integrated waste management requires different forms of energy recovery to be comprehensive. EPA itself is becoming more reliant on renewable energy; its offices and labs depend on renewable energy for 75 percent of their needs.

Web Based EMS Training Available

EMS Training 101. This online course provides an overview of Environmental Management Systems (EMS) and how EMS can support environmental improvements at facilities subject to environmental regulations. The intended audience for this course is anyone looking for an overview of EMS, including EPA Headquarters and regional staff, state regulators, and facility representatives.

More on this <u>course</u>: epa.gov/epaoswer/hazwaste/permit/em s/ems-101/ems101.htm More on EMS: epa.gov/ems

New Partner Spotlight

Region 2

- Partner: Caribe General Electric PR Investment, Inc. Goal: Eliminate lead by using non-leaded solder.
- Partner: Solectron
 Goal: Reduce lead by replacing leadbearing solder, components, and finishes
 with lead-free alternatives.

Region 3

- Partner: AutoRecyclers, LLC
 Goal #1: Reduce mercury by removing
 mercury-bearing light switch assemblies
 from vehicles during disassembly.
 Goal #2: Reduce lead by removing lead
 battery terminal ends.
- **Partner:** Federal Mogul, Powertrain **Goal #1**: Eliminate **lead** by using lead-free materials in products and <u>processes</u>.
- Partner: GE Fanuc Automation Goal #1: Reduce lead by using non-leaded solder.
- Partner: Kalas Manufacturing Plant #2, Goal: Reduce lead compounds by using lead-free or reduced-lead raw materials.
 Plant #3, Goal: Reduce lead through solderless product offerings.
- Partner: K&L Microwave, Inc. Goal: Reduce lead by replacing lead-bearing solders and tin with lead-free substitutes.
- **Partner:** Moog Components Group **Goal**: Eliminate **lead** in slip rings.

Region 4

• Partner: Osram Sylvania:Versailles Goal: Eliminate mercury through technology modification

Region 6

• Partner: Love Field Airport Goal: Reduce PCB by removing PCB containing ballasts and replacing with non-PCB containing ballasts.

Region 7

- Partner: Air National Guard Goal #1: Reduce chromium by using alternatives and fine-tuning all aircraft maintenance operations.
- Goal #2: Reduce methyl ethyl ketone by using alternatives and fine-tuning all sealant and painting operations.
- **Partner:** Current River Die Sinking **Goal #1:** Reduce **benzene** through process and technology modifications.

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compounds, and carbon monoxide.

Eliminating molten lead casting machines will reduce natural gas usage by about \$140,000 a year in Kernersville alone. Replacing the casting process also increases production rates and efficiencies.

JCI is committed to waste minimization; John M. Barth, Chairman and Chief Executive Officer, states, "We demand continuous improvement in all facets of our organization, including those that affect sustainability." This year, JCI will introduce this process at its other plants, increasing reductions exponentially. Read the JCI Success Story: epa.gov/minimize/johnson.htm

continued from page 1: U.S. Steel

lead-containing material can be significantly reduced without impacting product quality. Lead generation was reduced by 7,908 pounds, leading to a savings of over \$10,000 in waste disposal and \$22,000 in flux usage. The project cost was about \$5,600.

The second goal involved reducing the amount of chromium acid generated from a corrosion inhibitor solution important in the operation of a galvanizing line used to apply a thin layer of zinc to steel sheets. To achieve this goal, U.S. Steel installed an automatic chemical titration system to control the generation of chromium waste. Chromic acid waste generation was reduced by 5,900 pounds, leading to a total savings of approximately \$35,000. The payback period of the project cost of \$18,000 was only six months. Mike Hohman, Manager Environmental, U.S. Steel Mon Valley Works, states, "These projects are evidence that environmental improvements can also be good for business."

<u>Read</u> the U.S. Steel Success Story: *epa.gov/minimize/ussteel.htm*

continued from page 1:Sheppard AFB

PreKote is a non-chromium, nonhazardous, and non-toxic alternative to alodine. Sheppard also purchased an electro-coagulation unit for pretreatment of the rinsate prior to discharge as a nonhazardous wastewater because the PreKote contained trace levels of metals.

Prior to product substitution, Sheppard generated approximately 142,000 pounds of hazardous waste from acid alodine rinse operations. In addition, it cost \$40,000 annually to dispose of the rinsate. Through the substitution of PreKote, the collection, drumming, storage, labeling and managing, and disposal of alodine has been eliminated. Although this process required the purchase of an electro-coagulation unit, and an increase in material cost, the annual operation cost was reduced by \$36,000.

Following the success of Sheppard AFB's NPEP initiative, the Air Force directed all of their installations to implement this pollution prevention initiative.

EPA's New Mercury Portal Launched

EPA's new Mercury Portal, at epa.gov/mercury, was launched in January. The Mercury Portal integrates a large and diverse collection of mercury information from EPA and other sources. For example, you will find information on cleaning up mercury spills as well as fish consumption advisories. NPEP Bulletin readers will be particularly interested in the Portal's Business and Industry section. Here you will find information on reducing the use and release of mercury for various industries such as the auto industry. the chlor-alkali industry, and iron and steel production. The Mercury Portal also presents information on mercury laws and regulations.



Director's Corner

NPEP Bulletin

Jim Berlow,

Director, Hazardous Waste Minimization and Management Division

I am very pleased to introduce the first issue of our new NPEP Bulletin. I think this quarterly Bulletin is an excellent way for all of us at EPA to stay in touch with our NPEP partners and others involved in the important effort to minimize hazardous waste and reduce the generation of Priority Chemicals.

As the NPEP program grows and more partners join, it becomes increasingly important that we all communicate and share our news, successes, and lessons learned. This is the best way for us to succeed in our efforts. I hope that not only will you pass this Bulletin along to your associates, but that you will also contact us with your input on it, NPEP, Priority Chemicals, and other environmental priorities.

In Our Next Issue: State and Regional Waste Min Programs

Contact us to subscribe/unsubscribe to this Bulletin.

This Bulletin is sponsored by the National Waste Minimization website at epa.gov/wastemin.

Updated regularly – visit today.

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